#### Wildlife in the Park

The park lands were put aside to protect historic Civil War battlefields, they also protect many valuable wildlife habitats. As you walk along the trails, make sure to go quietly so you are more likely to encounter wildlife. You might see some of the remarkable creatures featured in this brochure or make a discovery of your own! While most of the animals at Richmond National Battlefield Park are harmless they should be admired from a distance. Animals may act unpredictably when frightened. To find wildlife, use the tips from this brochure and any

> other nature guides you might have.

Carolina Mantid: Here seen hunting a Japanese Beetle, it is a fierce predator of

### Conservation in the Park

Humans have a large role to play in the future survival and health of the animals described in this brochure. Many insect and spider species rely on clean air and water, and intact habitats in order to reach maturity and reproduce. The loss of habitat due to water and air pollution, wetland destruction, and deforestation result in devastating declines in these populations. Moths and butterflies are especially sensitive to habitat destruction because they require intact habitats for both caterpillar and adult stages. Dragonflies and damselflies are especially sensitive to water pollution because they carry out their larval stages in water. By using lawn care products responsibly to maintain clean water environments, making

sure garbage is placed in the proper receptacles, and ensuring that forested habitats are maintained we can work together to secure the futures of these fascinat- Luna Moth: These moths are only ing species.



found in North American deciduous forests. Adults only live about a week and are more commonly seen at night.

## Nature in Richmond National Battlefield Park



Yellow-necked caterpillar: larva of a Prominent Moth. Although the larvae are brightly colored, the adult moth is a simple brown. When disturbed, the caterpillars will raise both ends of their bodies like the one seen here.

This brochure is one of a series featuring wildlife in historic Richmond National Battlefield Park, Look for other brochures about the trees, plants & fungi, reptiles & amphibians, birds, and mammals.

#### Images from front:

Cow Killer Ant: This velvet ant has a misleading name—it is actually a wasp! This species has an extremely painful sting but has never been known to kill a cow or human.

Banded Net-winged Beetles: They resemble fireflies, and their bright colors indicate they are distasteful to birds and other predators. They have long antennae, and adults like those pictured feed on decaying plant material, so look for them under leaf litter.

Eastern Tailed Blue: This butterfly thrives in areas of encroachment unlike most other animals. Look for others like this in mowed fields like those at Malvern Hill or near puddles.

Venusta Orchard Spider: makes a spiraling orb web on a horizontal plane. These spiders can be found hanging below their webs or on nearby twigs and are distinguished by their coloring.

**Black-winged Damselfly:** Like other damselflies, it is more dainty and has a thinner abdomen than dragonflies. It also holds its wings upright when resting.

**Eastern Spotted Cucumber Beetle:** can be destructive to crops like cucumbers, corn and peanuts.

EXPERIENCE YOUR AMERICA™

National Park Service U.S. Department of the Interior

Richmond National Battlefield Park



## **Insects & Spiders**



### Richmond National Battlefield Park

Richmond, Virginia

## Insects

Insects make up well over 3/4 of all animal species on Earth, and scientists discover new species all the time! It should come as no surprise that they are very common throughout the park. Insects are invertebrates (have no backbone) that have 3 pairs of legs and 3 main body parts: head, thorax and abdomen. They generally

have 2 pairs of wings. Insects provide valuable services such pollinating plants, fertilizing soil and producing goods like silk and



Alutacea Bird Grasshopper: gets its name from its ability to fly long common distances. Look for this grasshopper in open battlefields.

honey. Look for these important creatures as you explore the park, and take note of the different types of insects you find in each habitat.

### Dragonflies & Damselflies

Dragonflies & damselflies spend the larval stage of



White Tail (Dragonfly): Like other dragonflies and damselflies has elongated wings and abdomen. Dragonflies catch flying insects with basket-like mouthparts.

their lives in streams eating mosquito larvae and other aquatic organisms, but even the adults would never harm a human. Their presence is an indication of clean water. Look for them darting gracefully around park streams and wetlands catching flying insects.

#### Beetles

This order of insects is the most numerous and



Six Spotted Green Tiger Beetle: is known for its speed and can be found along the forested walking trails in the park.

diverse group of animals on Earth. Adult beetles have 2 pairs of wings; the outer pair (elytra) is used as a hard protective covering for a softer pair underneath. Beetles are important recyclers of decaying material and can be found throughout the

park along the forest floor.

Eastern Hercules Beetle (Larva): helps recycle plant material, turning it back into nutrient-rich soil. Its adult form has a rhinoceros-like horn.



### Moths & Butterflies

Moths & butterflies have large wings covered with colorful scales that can be easily rubbed off if touched. These two similar groups of insects are the best known example of the complete metamorphosis life cycle (their adult and larval



stages take very different forms).

Rosy Maple Moth: These colorful moths can be found near Red Maple trees such as the one at Beaver Dam Creek near the bridge.



Question Mark (Butterfly): has a guestion mark-shaped marking on the underside of its wing. When at rest, these butterflies hold their wings at an

### Bees, Ants & Wasps

Bees, ants and wasps make up a diverse group of

social insects, all of which are environmentally important. Their jobs include pollination and recycling dead plant material. Without these animals, we would have far fewer fruits and vegetables.



# Spiders

Spiders are members of a group called "arachnids." Arachnids have 2 main body segments: cephalothorax and abdomen, as well as 4 pairs of legs. Often, pedipalps may be confused with legs, but they are much smaller than legs and are near their mouth parts.



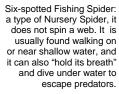
Black & Yellow Argiope: a type of Orb Weaver Spider. makes webs with a distinct zig-zag to help other animals avoid the webs.

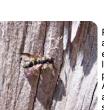
Pedipalps are used like hands to hold their egg sac or eat. Spiders are extremely beneficial animals because they eat many of the insects considered to be pests. They are well known for their ability to spin silk, used to create webs or, more commonly, to create an egg sac. A major misconception is that all spiders

are harmful to humans. In reality, spiders are very skittish and very few spiders have venom strong enough to harm a human. Spiders can be found in any part of the park.



Honeybee (Above) and hive inside of a hollow tree at the Fort Harrison unit (Left): this species of bee is fairly harmless to other animals. Their numbers have been declining in recent years, leading to problems with food production for humans. If you encounter a bee, watch its work from a distance; do not bother it, and it will not bother you.





Potter Wasp: makes a nest of mud for its eggs, which can look like pots, giving the potter wasp its name. Adults are pollinators and have a painful sting if disturbed.